

CLAIMS

1. An antimicrobial substrate having adhered to at least a part of its surface an organosilicon quaternary ammonium salt compound, characterized in further having adhered to at least a part of its surface a cationic polymer.

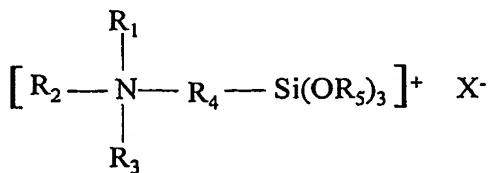
2. A substrate according to claim 1, wherein the cationic polymer is a hydrophilic polymer.

3. A substrate according to claim 1 or claim 2, wherein the cationic polymer comprises -NH- in the polymeric backbone.

4. A substrate according to claim 3, wherein the cationic polymer is a polyethylene imine.

5. A substrate according to claim 3, wherein the cationic polymer is polyhexamethylene biguanide hydrochloride (PHMB).

6. A substrate according to any one of claims 1-5, wherein the antimicrobial organosilicon quaternary ammonium salt compound is according to Formula II



Formula II

wherein

R₁ is an C₁₋₃₀ alkyl group, preferably an C₈₋₃₀ alkyl group,

R₂ and R₃, R₄ and R₅ each independently are an C₁₋₃₀ alkyl group or hydrogen, and

X is a counter ion, such as Cl⁻, Br⁻, I⁻ or CH₃COO⁻.

7. A substrate according to claim 6, wherein the antimicrobial organosilicon quaternary ammonium salt compound is 3-(trimethoxysilyl)propyl-dimethyloctadecyl ammonium chloride.

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8. A method for producing an antimicrobial substrate according to any one of claims 1-7 characterised in comprising:

10 adhering an organosilicon quaternary ammonium salt compound to at least a part of the substrate surface, and
adhering a cationic polymer to at least a part of
the substrate surface.

15 9. A composition for use in the production of an antimicrobial substrate according to any one of claims 1-7,
characterised in comprising an organosilicon quaternary ammonium salt compound and a cationic polymer.